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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,787	01/23/2004	Frederick Browne Gregg	64906-CON1	7948
7590		05/15/2007		
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			EXAMINER	
			CHIMIAK, EMILY ANN	
			ART UNIT	PAPER NUMBER
			1733	
			MAIL DATE	DELIVERY MODE
			05/15/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/763,787	Applicant(s) GREGG ET AL.	
	Examiner Emily Chimiak	Art Unit 1733	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 61-76 is/are pending in the application.
- 4a) Of the above claim(s) 64 and 75 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 61-63, 65-74 and 76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

Art Unit: 1733

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of Species A in the reply filed on October 25, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP 818.03(a)). Claims 54 and 75 are withdrawn from consideration as being drawn to a non-elected invention.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blom '457 in view of Teare '413 and Emerson '954.

Blom discloses a method of manufacturing aerated concrete sheets, said method

Art Unit: 1733

comprising: dispensing materials for making aerated concrete into a mold and allowing the materials to rise and stiffen into a body; dividing the body into a plurality of uncured sheets having opposing first and second major surfaces to serve as the core material; cutting the core material into a plurality of uncured second sheets; and curing the uncured wallboard or backerboard sheets in an autoclave (figures 1, 2, 4; column 4, line 6 – column 6, line 50). The reference is silent as to a method wherein face sheets are added to the major faces of the core material before cutting occurs.

Both Teare and Emerson disclose a method of manufacturing a wallboard or backerboard, said method comprising securing first and second paper face layers to first and second major surfaces of a core of concrete material, and then cutting said face layers and core material to form a wallboard or backerboard and curing said wallboard or backerboard in an autoclave. The addition of the face layers strengthens and reinforces the concrete core. Therefore, at the time of invention it would have been obvious to a person of ordinary skill in the art to modify Blom such that first and second face sheets are secured to the major surfaces of the concrete core to form a wallboard or backerboard before curing as taught by Teare and Emerson above. Such a modification to Blom would improve the strength of Blom's product.

5. Claims 65 and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blom, Teare and Emerson as applied above, and further in view of Lawlis '333.

Blom, Teare, Emerson disclose a method as discussed above but the references are silent as to a method wherein longitudinal edges are beveled. Lawlis discloses a method of manufacturing a wallboard comprising a core with two face sheets, wherein longitudinal edges are beveled for easier installation of the wallboard (column 1, line 36 – column 2, line 2, figure

Art Unit: 1733

1). Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to bevel the edges of the wallboard disclosed by the combination of Blom in view of Teare and Emerson in order to simplify installation as disclosed by Lawlis above. Claims 68-70 do not contain any limitations different from those required by claims 61-63 and 65 and thus the combination of references renders the limitations of claims 68-70 obvious for the reasons discussed above.

6. Claims 66 and 73-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blom, Teare and Emerson as applied above, and further in view of Mathieu '409.

Blom, Teare and Emerson disclose a method as discussed above, but the references are silent as to a method wherein the face layers are extended around the opposing longitudinal side edges. Mathieu discloses a method of manufacturing a wallboard with face layers attached to the first and second major surfaces of a core, said layers further including a side member 36 that extends around the opposing longitudinal side edges (column 21, line 9 – column 22, line 17). Said side member provides strength for the edge regions (column 2, lines 48 – 51). At the time of the invention it would have been obvious to a person of ordinary skill in the art to extend the face sheets of Teare and Emerson around the side edges of Blom's board in order to strengthen the side edges as taught by Mathieu above. Claims 73-75 do not contain any limitations different from those required by claims 61-63 and 66 and thus the combination of references renders the limitations of claims 73-75 obvious for the reasons discussed above.

7. Claims 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blom in view of Teare and Emerson as applied above, and further in view of King '620.

Blom, Teare and Emerson disclose a method as discussed above, but the references are

Art Unit: 1733

silent as to a method wherein the aerated concrete is fiber reinforced. King discloses a method of manufacturing aerated concrete to be used as a backerboard and further discloses reinforcing said aerated concrete with fibers in order to increase the strength of said concrete (column 1, lines 38 – 44, column 2, lines 54- 58). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Blom such that Blomm's concrete is fiber reinforced for increased strength as taught by King above.

8. Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blom, Teare, Emerson and Lawlis as applied above, and further in view of Mathieu '409.

Blom, Teare, Emerson and Lawlis disclose a method as discussed above, but the references are silent as to a method wherein the face layers are extended around the opposing longitudinal side edges. Mathieu discloses a method of manufacturing a wallboard with face layers attached to the first and second major surfaces of a core, said layers further including a side member 36 that extends around the opposing longitudinal side edges (column 21, line 9- column 22, line 17). Said side member provides strength for the edge regions (column 2, lines 48-51). At the time of the invention it would have been obvious to a person of ordinary skill in the art to extend the face sheets of Teare and Emerson around the beveled side edges (as suggested by Lawlis) of Blom's modified board in order to strengthen the side edges as taught by Mathieu above.

***Allowable Subject Matter***

9. Applicant is respectfully notified that if claim 61 is amended to recite that the uncured sheets are end-to-end joined and placed on a continuous belt as shown in figure 15, claims 61-67 would be placed in condition for allowance.

***Response to Arguments***

10. Applicant's arguments filed 04/17/2007 have been fully considered but they are not persuasive. As to the argument concerning the function of Emerson's gauze/perforated paper and the material of the core, applicant is notified that the examples do not limit the disclosure of a reference and that gypsum wall board may be made of any material which exists in one stage of its formation in the plastic state (Emerson, col. 2 lines 72-77). Also, although the paper is waterproofed in one embodiment, the paper is used for reinforcement (Emerson, col. 1 lines 30-33 and col. 2 line 83). As to the argument regarding the paper, it is noted that the reinforcing face layer requires the paper layer not only as a mold but also as a separator sheet between panels after they are stacked, and therefore would not require adding a redundant functionality to the mold device of Blom (Teare, col. 7 lines 37-43).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Chimiak whose telephone number is (571)272-6486. The examiner can normally be reached on Monday-Friday 8:30-5:30 EST.

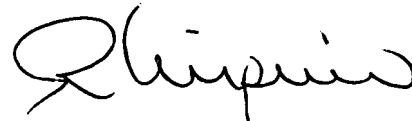
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)272-6486. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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